CALFED OPERATIONS COORDINATION GROUP
AUGUST 27, 1998 MEETING NOTES AND ACTION ITEMS

Review of July 23 meeting notes

The date of the September meeting was incorrectly identified on the bottom of the agenda that was mailed out with the July meeting notes. The date of the meeting remains as originally scheduled, September 24.

Announcements

The following handouts were provided at the meeting:

1. Delta Smelt Summer Townet Abundance Index, DFG, D. Sweetnam
2. Summary on the Findings of the SMSCG Steering Group, DWR, H. Rooks
3. SWP Operations Package, DWR, V. Pacheco
4. San Joaquin River at Vernalis Forecast, USBR, J. Burke
5. Report to CALFED on W.S. and W.Q. Measures for Potential Stage 1 Implementation Measures, (Executive Summary) CCWA/NNG, G. Gartrell

Presentation on Steelhead Biology and Management, D. McEwan, DFG

Mr. Dennis McEwan of DFG presented his analysis on the biology and management of steelhead trout in the Central Valley.

Steelhead are the anadromous form of rainbow trout. Not all rainbow trout migrate to sea. Non anadromous rainbow trout are also referred to as resident rainbow trout.

Runs may occur during all seasons, although the California variety do not make runs in the summer. Steelhead populations seem to be stratified on a geographic basis rather than on a life history or behavioral basis. That is, rainbow trout and steelhead within a stream system appear to be more closely related regardless of run timing or migratory behavior.

Juvenile steelhead rear up to three years in fresh water before migrating out to sea. Steelhead adults do not necessarily die after spawning and sometimes return for multiple spawnings. Gonad maturity may take place in either the ocean (winter) or in stream (summer) in California.

Historically steelhead have ranged throughout the Central Valley from the upper Sacramento to the southern San Joaquin Valley. The present steelhead spawning and rearing habitat is 80-82 percent less than 50 years ago.

In 1996 NMFS proposed to list Central Valley steelhead as endangered. In March of 1998 NMFS listed Central Valley steelhead as threatened instead of endangered in recognition of recent protection and restoration actions by the ongoing CALFED and CVPIA programs.

The upper Sacramento tributaries of Mill and Deer Creeks have historically been good habitat for Central Valley steelhead, although the population has decreased considerably from over a thousand in the 1960s.

Steelhead are also found in many steams within the Central Valley drainage, including the large tributaries such as the Feather, Yuba, American, Mokelumne, and Stanislaus Rivers. The presence of juvenile steelhead has been observed every year since 1995 in the Stanislaus including anecdotal evidence for the presence of adult steelhead and capture of emigrating juveniles. Juvenile steelhead may be differentiated from the resident variety by the fact that they smolt. Smolting is the physical and physiological process necessary for saltwater migration. Physical changes include development of silvery coloration and deciduous scales which serve to differentiate the andromous from freshwater forms.

Year round cool water habitat is essential to steelhead restoration and current efforts to restore chinook populations may not assist with steelhead recovery due to summer rearing habitat requirements.

NMFS speculated that local diverters might have a significant impact on steelhead juveniles due to concurrence of migratory and irrigation seasons.

There is no commercial harvest of steelhead in California.

The following measures could protect Central Valley steelhead:

- Maintain cold water habitat below existing impoundments. The focus should be on restoring steelhead to their historical habitat rather than introducing them above natural barriers.
- Provide fish passage facilities around dams. Present techniques exist for getting migrating adults around dams including fish ladders and "trap and truck" methods. The greatest technical challenge is to allow return passage for out migrating juveniles and adults.
- Provide better monitoring programs.

Fishery Status

Steelhead: The rule proposed under section 4(d) of ESA that will prohibit take of steelhead is under development at NMFS headquarters and a final decision is expected to be issued by the end of the year.

DWR and USBR are consulting with NMFS for a one-year biological opinion that will address CVP and SWP operations on Clear Creek, the upper Sacramento, Feather, American and Stanislaus Rivers. As part of the consultation process, a biological assessment is being prepared by DWR and USBR and is scheduled to be completed in November. Formal consultation will proceed at that time. NMFS is scheduled to issue a biological opinion prior to USBR's delivery allocation announcement in mid-February 1999. This assessment will also consider spring-run chinook salmon; a State listed and federally proposed species. The resulting document should be similar to the NMFS Central Valley Project Operations Criteria and Plan Biological Opinion for winter-run chinook.

Delta smelt: DFG reported that the annual summer townet abundance index for delta smelt in 1998 is 3.3. This is down slightly from the 1997 index of 4.0.

Delta smelt distribution ranged from San Pablo Bay to the Lower Sacramento River in early July (Survey 1) with the highest concentration in Suisun and Honker Bays and Montezuma Slough. By the end of July (Survey 2), the downstream extent of the distribution had shifted to San Pablo Bay and the Napa River with the highest concentrations remaining in Suisun and Honker Bays.

Normally, the sampling station in the Napa River is not included in the calculation of the abundance index because sampling at that station has only taken place since 1978. Since over 20 percent of the delta smelt catch in this year's second survey was in the Napa River, the index was adjusted to show how that catch would affect the index. The adjusted index is 3.6 for 1998. The adjustment does not affect the 1997 index which remains at 4.0.

There have been no delta smelt salvaged at the SWP and CVP facilities in August.

Splittail: The regional director of USFWS has requested a prompt decision on the listing of splittail. A decision is expected before next month's CALFED Ops meeting.

Chinook Salmon: DFG preliminary snorkel survey results on the upper Sacramento tributaries has revealed 154 spring run adults in Antelope Creek, 400 in Big Chico Creek, 1,450 in Deer Creek and 18,000 in Butte Creek. The Butte Creek escapement of 18,000 salmon was from the 1995 cohort of 7,500 fish. Snorkel surveys are also being conducted on Deer Creek, downstream from the traditionally used summer holding areas. Higher than average flows make habitat further downstream more suitable. Adult spring-run may have held there during the summer instead of migrating farther upstream.

UPDATE: The Fish and Game Commission voted to list Sacramento River spring-run chinook salmon as threatened under the California Endangered Species Act. The actual listing will not take regulatory effect for several months.

Preliminary winter-run escapement estimate is in excess of 2,600 adults at Red Bluff Diversion Dam. This would be the highest total in over ten years and double the 1995 cohort.

The results of the carcass survey may yield even higher estimates for juvenile smolt migration downstream.

Suisun Marsh Salinity Control Gate Flashboard Modification Presentation

DWR gave a presentation on the SMSCG flashboard modification project to be implemented over the next three years beginning this fall.

The impetus for this project was the USACE permit issued to DWR for the construction and operation of the SMSCG in May 1986. One of the special conditions of the permit was to implement a monitoring program to establish the magnitude and nature of delays and predation losses to migratory fish and establish a list of indicator species whose populations will be studied.

In 1993 and 1994 DFG monitored the passage of migrating adult fall-run chinook salmon through the SMSCG. The results from these studies indicated that the operation of the gates delay and block the upstream migration of salmon. It was also found that adult salmon might have been d layed when the flashboards were installed and the gates were fixed in the open position.

The SMSCG Steering Group recommended several alternative modifications and additional monitoring to evaluate performance. The objective for the modifications is to provide opportunity for steelhead and all races of salmon to

pass unimpeded through the SMSCG when the flashboards are installed and the gates are operating while meeting water quality requirements.

The selected modification alternative will create two horizontal slots, (each three feet high) in the flashboard using two sets of spacers that will provide passage at different depths.

Monitoring, similar to the methods employed in the DFG monitoring in 1993 and 1994, will be used this year. Salmon captured in the vicinity of the SMSCG, will be tagged with sonic tags and released in the same location and their movement tracked. Hydroacoustics and depth-sensitive hydroacoustic sonic tags will allow for determination of depth preference and behavior.

The experiment will be conducted in three phases; the first phase will begin October 1 and the last phase will be completed November 10:

- Phase One: Standard flashboards will be installed and the gates will be operated.
- Phase Two: The flashboards will be removed and the gates will be fixed in the up position.
- Phase Three: The modified flashboards will be installed and the gates will be operated.

Channel water salinity will be monitored at compliance and ..onitoring stations within the Marsh to determine the effects of the modified flashboards on salinity control.

Permits for CEQA, Federal ESA, and USACE will be required for implementation of this project. The SWRCB has been petitioned in accordance with condition 6 of Water Right Decision 1485 for a variance from salinity compliance at stations C-2, S-21, S-42, S-64, S-35, and S-97 in the interior of Suisun Marsh.

SWRCB is taking comments on the SMSCG modification project until September 2 and will vote on the petition September 17.

Operations

Delta Operations Criteria: Water quality is good and excess conditions exist in the Delta.

CVP/SWP Operations Status: Sacramento River flows are 25,000 cfs and San Joaquin River flows at Vernalis are 5,000 cfs. SWP exports are 4,000 cfs but will

be increasing to meet demands and fill the State share of San Luis Reservoir in early November. Release to the Feather River is currently at 5,500 cfs but will be increasing in September to reach a target flood control level at Oroville Reservoir on November 1.

Although USBR is lowering the CVP reservoirs to reach flood control levels by target dates in November and December, release rates will not increase. Tracy Pumping Plant is pumping close to capacity and the federal share of San Luis Reservoir should fill by the first of December.

Forecasted 1999 Operations: USBR and DWR staff are conducting modeling studies with various assumptions to assess risk to CVP and SWP water exports due to AFRP Actions. The assessment will include evaluation of tools, such as joint point of diversion and water purchases. Operations staff will be looking at the 90% and 50% hydrology exceedences when conducting these studies through March 2000. Results should be available by the beginning of October.

These studies will be utilized for the steelhead and spring-run chinook salmon biological assessment, which will take a look at longer term impacts.

VAMP/San Joaquin River Hydrology: The administrative draft EIS/EIR for the San Joaquin River Agreement was completed at the end of July. The public draft will be released by the end of September, followed by a 45-day comment period. The first public meeting will be held October 29.

The 1998 water supply index estimate as of August 1 is 5.66. The implications of this for the SJRA in 1999 is that the test flow target double-step criterion will apply for all exceedence probabilities except for the critical water year classification. The dry water year classification would be the most challenging condition to meet, although the USBR indicated that it would be prepared to meet it.

San Joaquin River Basin reservoirs will increase releases for flood control evacuation as follows: Tuolumne River through mid October, Merced River through the end of October, and the Stanislaus River through the end of November.

Temporary Barriers: DWR received a letter from SDWA on August 14 requesting the installation of the Tracy Old River and Middle River temporary barriers due to complaints of low water levels from Westside Irrigation District and Old River diverters on Fabian Tract. That same day DWR staff from the divisions of Operations and Maintenance, Engineering, and Planning met with SDWA to discuss possible installation. It was agreed that over the weekend the contractor

would be given notice to mobilize for installation and USBR staff would generate a forecast of San Joaquin River flows at Vernalis. The resulting forecast projected flows of between 5,000 and 7,500 cfs through the beginning of October. DWR has determined that when flows exceed 5,000 cfs at Vernalis the installation of the temporary barriers is not feasible due to levee scour, hazardous working conditions and the associated liability. Therefore, the planned installation was abandoned and it appears unlikely that installation will take place this year.

Although no barriers are planned for this year, DWR Planning staff continues to work on permits for a head of Old River temporary barrier with six culverts. This design would minimize impact to south Delta water levels. DWR is working with DFG, the City of Stockton, South Delta Water Agency, and the USACE on this configuration.

SWRCB

The Bay-Delta water right hearing will reconvene on September 15 with Phase 4 regarding settlement agreements on the Sacramento River tributaries and the east side streams. Phase 5 will commence at the conclusion of Phase 4. Phase 5 deals with southern Delta salinity and dissolved oxygen. Phase 5 will be followed by Phase 2A if there is sufficient time to review presubmitted evidence, otherwise Phase 5 will be followed by Phase 6. Additional hearing days are likely to be announced for November and December. The extension of Order WR 95-6 will be decided before the end of this year.

No Name Group

The NNG handed out a draft executive summary of its report to CALFED on Stage 1 early implementation measures. Highest priority measures for evaluation are: Interim South Delta Program, joint point of diversion, Delta Mendota Canal/California Aqueduct intertie, and Madera Ranch groundwater storage. Second priority measures are small enlargement of Shasta Dam and in-Delta storage (e.g., CALFED proposal, Delta Wetlands). Other near term measures such as water transfers were also examined and should be considered.

The NNG report along with a DEFT presentation will be discussed with the CALFED Management Team on September 1. The NNG and DEFT reports will be consolidated and a draft will be made available in advance of the September 15 CALFED Policy Group Meeting.

Unresolved issues related to all measures require further work and/or mitigation measures. Continued NNG work with the Diversions Effects on Fisheries Team (DEFT) on operational criteria is needed in conjunction with water supply measures for protection of fisheries.

In most cases, project specific environmental documentation may be needed on a time tract parallel to the CALFED EIS/EIR Record of Decision if early implementation is desired.

Many limitations exist on the modeling. Not all water quality and biological requirements are met in the water supply analysis. Examples include Vernalis water quality and flow standards; and Shasta Reservoir levels required to ensure downstream temperature control. A number of baseline issues were not resolved, including Trinity River flows, overall Delta requirements, San Joaquin River flows, and full compliance with the Water Quality Control Plan.

Agenda Items for the Next Meeting . . . September 24